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A multicriteria analysis of the Community Initiative
INTERREG II Spain-Morocco (1994-1999)

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Abstract

The aim of this paper is to present and analyse the projects within the INTERREG II Spain-Morocco (1994-1999) Community Initiative which was designed to develop cross-border co-operation. This work does not attempt a full evaluation of the programme. Rather, it is a necessary preliminary study for developing a final evaluation of the programme from a bottom-up perspective. Thus, its contribution to the analytical agenda of the evaluation consists of reconstructing the logic of the programme by classifying the projects in terms of three main criteria: absorption rate, contribution to the production of expected impacts, and “synergy” with another programmes. The conceptual basis of the work is the Multicriteria Analysis methodology recommended by the European Commission’s MEANS framework.

Keywords: Cross-border co-operation, Spain, Morocco, INTERREG II, Multicriteria Analysis.

1. Introduction.

This communication offers a summary of the report commissioned by the Regional Andalusian Government (Junta de Andalucía) regarding the actions within the INTERREG II Spain-Morocco Operational Programme at its closing date (31/12/1999). The report deals with those actions exclusively under the responsibility of the Andalusian Government. Basically, this summary has two main purposes: presenting the outlines of the INTERREG II Spain-Morocco Operational Programme (OP) and proposing a methodology for the comparative assessment of the projects using Multicriteria Analysis methodology. With these two objectives in mind, the paper is structured into four sections. The first section outlines the OP within the context of regional development policies and analyzes its characteristics and fundamental aims. The second section studies the socioeconomic context in which the OP takes place on both sides of the border. Next, we introduce the methodology developed for the comparative analysis of the different spheres the Programme is structured into (i.e., projects, actions, measures, and subprograms). The design of this methodological proposal was negotiated with the agents involved in decision-making, following the recommendations of the MEANS programme from the European Commission, and uses Multicriteria Analysis and a bottom-up methodology. This section describes the comparison criteria used and how they have been aggregated to make possible a comparative analysis of the different spheres in which the programme take place. Finally, in the fourth section, the actual comparative analysis is made based on the results obtained after applying the methodology developed for this purpose. It offers a summary of the contribution of each action (project or set of projects) to the value of the programme as a whole from the perspective of the criteria proposed. We would like to note that the work of Marchante, López, Ortega, and Ruiz (2001) describes and analyses in more detail all the actions managed by the Andalusian Government and integrated in the OP. That work studies the characteristics of each action as well as its labor and absorption rate indicators, its contribution to the specific objectives of the OP, its compliance with EU regulations and policies, as well as synergy with other programs.

2. The INTERREG II Spain-Morocco Operational Program.

The INTERREG II Community Initiative was designed to promote cross-border cooperation. This initiative received 24.65% of the total funding allocated to different community initiatives during the period 1994-1999. The Commission approved the

INTERREG II initiative in the meeting held on 15 June 1994, according to Article 11 of CEE Regulation no. 4253/88 -- later modified by Regulation no. 2082/93 -- and which was a continuation of the INTERREG initiative approved by the Commission on 30 August 1990 for the period 1990-1993. The main innovation of this new initiative was providing help for the 1994-1999 period to regions on the external borders of the EU and which were included in the NUTS III administrative level. The general objective of INTERREG is to prevent national borders from becoming an obstacle to balanced development and integration within the European territory. The aim is to correct the negative effects deriving from the relative isolation some border areas suffer from, mainly due to the fact that borders economically, socially, and culturally separate neighboring communities and inhibit the coherent management of ecosystems. On the other hand, the European Commission estimates that these border areas occupy a secondary place within national policies, which increases the peripheral character of their economies within the national territory.

The INTERREG II report includes three different chapters: Chapter A relates to cross-border co-operation and has most of the resources allocated to it (around three-quarters of the budget); Chapter B deals with completion of energy networks, which is a continuation of the old REGEN Community Initiative; finally, Chapter C addresses co-operation in the area of regional planning, in particular management of water resources. On 1 June 1994 the Official Bulletin of the EU published the list of areas eligible for help as well as some guidelines from the Commission. A total of 59 Operational Programmes were presented within the ambit of Chapter A INTERREG II. Spain participated in three INTERREG II OP with Portugal, France, and Morocco. These OPs received 69.7%, 13.2%, and 17.1% of the total funding given to Spain for these initiatives.

On 3 November 1994, under the framework of INTERREG II, the Spanish Government presented the European Commission with the OP for the border areas between Morocco and Spain, which was approved by Decision C (96) 1560 of the Commission on the 23 July 1996. Later, some modifications were made, and the OP analyzed in this study refers to the second rescheduled one dated 14 December 1999 (Document C-99, 4139). The INTERREG II Spain-Morocco OP aimed at developing crossborder cooperation between these two countries and accelerating the tempo of adaptation and integration of the region within the single market. The programme is aimed at the provinces of Cadiz and Málaga as well as at the towns of Ceuta and

Melilla, located in North Africa. In special cases, the NUTS III areas adjoining the provinces of Cadiz and Málaga were also considered eligible areas, but no more than 20% of the total budget allocated to the OP could be used in them. The main objective of the OP is to contribute to the integrated and sustained development of these areas by actions that could help to overcome their structural economic problems and close the developmental gap between them and the average development of the EU, while respecting the natural ecosystem of these regions. The following three objectives were established in order to achieve this aim:

- 1) To increase the competitiveness of the production system.
- 2) To accelerate convergence with the more developed economies.
- 3) To promote cooperation and development between border regions in order to increase economic cooperation, facilitate communication, and contact between the population and the economic agents.

The funding allocated to the OP is nearly 200 million Euros, which places it 6th by rank among the 59 approved INTERREG II OP's, and represents 7% of the total. The INTERREG II Spain-Morocco OP is subdivided into two categories: a regional and a multi-regional one. The first one is also split into a three further categories, depending on which administration (local or regional) is in charge of its management, i.e., the Andalusian government or the cities of Ceuta and Melilla. On the other hand, the multi-regional category is divided into three sections, depending on who manages the funds, i.e., local institutions (the local and regional Councils of Cadiz and Málaga, and the Community of the Lower Guadalquivir), public enterprises (Red Eléctrica Española, Compañía Telefónica, and Puertos del Estado) or the Central Regional Government. Bearing in mind this division of the OP, this work focuses on the regional category of the INTERREG II Operational Programme (Chapter A) administered by the Andalusian Government. This regional section has an allocated budget of 53.3 million Euros (40 million from the FEDER and 13.3 million from the Junta de Andalucía), which represents 26.76% of the total financing granted to the programme. Within the regional section, the most important project is the construction of an electric power connection between Spain and Morocco via an undersea cable crossing the Straits of Gibraltar (the project is being carried out by the public utility Red Eléctrica Española and it is financed with 40% of the total budget allocated to the OP). Other relevant investments in infrastructure have been carried out in the ports of Cadiz, Algeciras, Ceuta, and Melilla, all of which were financed with funds allocated to this category of

the OP. These investments in infrastructure, like those carried under the regional category, represent around 85% of the total funds given to the OP.

Regarding its structure, the OP is implemented via four action subprograms, which are integrated by various measures into which different actions fall. Tables 1 and 2 offer a list of these subprograms as well as their objectives and the measures under which they are implemented. Table 3 shows the actions included in each measure and the typology of their managing bodies. This work analyses a total of 114 projects integrated within the 21 actions shown in Table 3. As pointed out above, these projects are included in the category of the OP managed by the Andalusian Government.

Table 1. *OP Subprograms: objectives.*

| SUBPROGRAMS | OBJECTIVES |
|--|---|
| 1. SOCIO-ECONOMIC DEVELOPMENT | 1. Developing a diversified, modern, and competitive economy by mobilizing initiative and local and rural development |
| | 2. Increase the added value of human potential |
| | 3. Improving economic functionality and the living conditions of people in the main urban centers |
| | 4. Creating new methods of cross-border cooperation and making the existing ones more dynamic |
| | 5. Reducing social, institutional, and administrative barriers |
| 2. ENVIRONMENTAL AND ARCHITECTONIC HERITAGE | 1. Protecting and increasing the added value of water resources |
| | 2. Preserving and increasing the added value of parks and natural reserves |
| | 3. Recovering and revitalizing the cultural heritage |
| 3. IMPROVING THE PERMEABILITY OF THE BORDER | 1. Improving cross-border communications regarding road networks, ports, and telecommunications |
| | 2. Promoting territorial planning of the border space |
| 4. MANAGEMENT AND MONITORING | 1. Monitoring OP actions |
| | 2. Assessing the OP |
| | 3. Spreading information about the OP |

Table 2. *OP Subprograms: Measures.*

| SUBPROGRAMS | MEASURES |
|--|---|
| 1. SOCIO-ECONOMIC DEVELOPMENT | 1.1. Support materials for production |
| | 1.2. Development of the urban systems |
| | 1.3. Increasing dynamism and cooperation between businesses and in the tourism industry |
| | 1.4. Increasing the dynamism of and cooperation between institutions |
| | 1.5. Actions from economic and social agents |
| 2. ENVIRONMENTAL AND ARCHITECTONIC HERITAGE | 2.1. Protecting water resources |
| | 2.2. Protecting cultural heritage |
| | 2.3. Recovering architectonic heritage |
| 3. IMPROVING THE PERMEABILITY OF THE FRONTIER | 3.1. Connections and spatial planning |
| | 3.2. Telecommunications |
| 4. MANAGEMENT AND MONITORING | 4.1. Supporting completion, management, evaluation, and monitoring |

Table 3. *Actions included in the regional category of the OP.*

| ACTIONS (1) | FINANCIAL SUPPORT FROM FEDER (2) | MANAGEMENT (3) |
|---|---|-----------------------|
| 1.1.1. Actions on energy issues | 1,445 | UP and RA |
| 1.1.3. Studies and complementary work for the new high-speed train to Málaga | 2,186 | RA |
| 1.2.1. Cooperating on health issues with Morocco | 0,130 | RA |
| 1.3.1. Socio-economic collaborative action with Morocco | 0,090 | UP |
| 1.3.2. Support and consultancy for small business enterprises | 0,349 | UP |
| 1.3.3. Cross-border networks for economic contacts | 0,069 | UP |
| 1.4.2. Personal services for travelers | 2,191 | RHCS |
| 1.4.3. Primary Care Health Programs | 1,028 | RHCS |
| 1.4.4. Suggestions and guidelines for institutional cooperation between Andalusia-Morocco | 0,045 | RA |
| 1.5.1. Business cooperation in Morocco | 0,326 | BA and RA |
| 1.5.2. Collaboration programme between the Commerce Chambers | 0,450 | CC and RA |
| 1.5.3. Cross-border cooperation in labor issues | 0,112 | U and RA |
| 1.5.4. Cross-border committees comprising social agents | 0,113 | U and RA |
| 2.1.1. Seminars and promotional workshops on water resources | 0,180 | RA |
| 2.1.2. Workshops on technological and organizational transfer regarding water issues | 0,288 | RA |
| 2.1.3. Coordinated programme of planning, recovery, and improvement of the Oued-Lao basin (Morocco) | 0,397 | RA |
| 2.1.4. Transfer Programme and technological shows on water issues | 1,399 | RA |
| 2.1.5. Recovery and improvement programme of the Guadalete and Barbate rivers (Cadiz, Spain) | 1,803 | RA |
| 2.2.1. Promoting transnational cooperation in environmental issues | 3,601 | RA |
| 2.3.1. Cooperation on architecture and housing | 0,136 | RA |
| 3.1.1. Jerez-Algeciras motorway | 23,617 | RA |
| 4.1.1. Spreading information and monitoring | 0,045 | RA |

Notes. (1) The first two digits of the Action represent the measure to which it belongs. (2) Millions of Euros. (3) BA= Business Associations, RA= Regional Administration, CC = Chamber of Commerce, UP = Public Utility , RHCS = Regional Health Care Service, U = Unions.

3. The socio-economic context of the INTERREG II Spain-Morocco Operational Program.

Andalusia (level NUTS II) is the most southern peninsular region in the EU. It has a surface of 87,268 km², accounting for slightly more than 17% of Spanish territory. Its population is 7,236,000 inhabitants (18% of the Spanish population). Within the 15 countries comprising the EU, it represents 2.7 % of their total area and 2% of the total population.

The implementation of the OP is restricted to two provinces, i.e., Cadiz and Málaga (NUTS III). These provinces are the closest to Morocco and where most human and goods transit to and from Morocco. They comprise 16.8% of the total surface of the region, 32.4% of the population, and 34.8% of the Andalusian GDP. Their economy is based on the service sector --mainly activities related to the tourism industry -- because they have a long coastline and important tourist areas such as the Costa del Sol. 48.5% of all the hotel accommodation in the region is concentrated in Málaga and Cadiz and there are more hotels in these two provinces than in the whole of Morocco.

On the Moroccan side, the borders are in the Rif region, which extends along the Atlantic coast up to the Algerian border. Three of the 16 economic regions of Morocco are found here. From west to the east these comprise Tanger-Tetuan, Taza-Al Hoceima, and the *Orient*. The first of these is the one closest to the Spanish borders and most OP actions taking place in Moroccan territory were directed towards this area, principally in Tanger, Tetuan, Larache, and Chefchauen. We have to add Nador in the Eastern region. This area represents 21% of the Moroccan population and is characterized by a very low per capita income as well as socioeconomic development indicators far from the European Union average. Similarly, its economic infrastructure and social resources are very limited. Despite being the closest region to the European continent, some socioeconomic indicators show a level development below the average in Morocco. Compared to the rest of Morocco, the Tanger-Tetuan region shows higher rates of fertility and illiteracy, as well as a larger amount of the population living from farming and deficient infrastructures. The main socio-economic unbalances of Morocco are:

1. In 1999, the unemployment rate was 15% and 23% in urban areas.
2. In 1999, Morocco had 5.3 million people living in poverty versus 3.36 millions in 1991; its poverty rate grew almost 6 points (from 13.1% to 19%).
3. There are strong interregional unbalances and social differences between the rural and the urban environments. In rural areas the level of illiteracy is 67% versus 26%

in urban areas. 54% of children in rural areas do not go to school and only 4% of the population reaching secondary school come from rural areas. Compared to urban areas, the rate of poverty in rural areas is double (27.2% versus 12%) and the fertility rate is also much higher (2.6 versus 4.3).

4. In 1996, the minimum wages for a working day (8 hrs) was 9 Euros.
5. In 1998, Morocco was ranked in the 130th place at a worldwide level and its per capita GNP was 1,250 \$ (3,120 \$ in pps). Its disposable gross domestic income per capita is equivalent to 16% of Andalusia's.
6. High foreign debt and public deficit. This latter unbalance has been highly reduced in recent years; in 1980 it was 9.7% of the GNP while in 1997 it was 4.4%.
7. All this has given rise to intensive migration, Cadiz and Málaga being the main entries to the European Union of illegal immigrants in search of better living conditions, via the Straits of Gibraltar which is crossed in small, precarious boats. Moroccan immigration, initially formed by workers without qualifications, has widened now to include qualified workers and degree students; this exodus means a loss of human capital, essential for the economic and social modernization of the country.

These serious socio-economic unbalances translate into important differences between the two sides of the borders regarding per capita income and other socio-economic indicators. Such differences are not so marked in other external borders of the UE, and this one is the poorest. Thus, this border does not break a socio-economic unity, or split a homogeneous space, as is the case in other cross-borders areas of the EU.

4. Methodology applied to the assessment of the Operational Program: the Multicriteria Analysis.

In principle, the main problems faced when attempting to make a comparative analysis of the different actions, measures, and subprograms developed within the regional category of the INTERREG II Spain-Morocco OP are the following:

1. Trying to compare a set of projects whose nature is very heterogeneous.
2. Working with projects whose results are in many cases difficult to quantify or are not identifiable at the closing date of the OP.

3. Summarizing the results attributed to each project developed in the OP, taking into account the different levels of planning from which general priorities were defined (actions, measures, and subprograms).
4. Providing the analysis with credibility, by basing the diagnosis on an explicit and accepted criteria.

The MEANS programme of the European Commission (MEANS, 1999, vol. 4), suggests different evaluation methods for use in similar contexts. Among the procedures proposed we have chosen the Multicriteria Analysis (MCA) as the one best-suited to our purposes. The MCA allows us to develop an explicit assessment based on multiple criteria, thus facilitating explaining the reasons that justify a given comparative evaluation of heterogeneous projects.

The MCA can be divided into several stages:

STAGE 1. Inventory and definition of the projects to be evaluated.

STAGE 2. Identification and selection of project attributes or the criteria used on which to base the comparative assessment.

STAGE 3. Determining a weight for each criterion which would reflect the relevance attributed to it in relation to other criteria.

STAGE 4. Quantitative estimation or qualitative description of the scores of each project in terms of the criteria selected.

STAGE 5. Obtaining the value resulting from calculating the weighted mean of the score according to the different criteria used for each project.

STAGE 6. Sensitivity analysis to test the robustness of the results regarding variations on scores and/or assigned weights.

This methodology is based on a set of axioms conforming to what Keeney (1982) called “formalization of common sense”. In addition, it is a flexible technique: in every stage the assessor can go back to the previous one and change the definition of the problem.

A formal presentation of the assessment system of MCA.

In the fields of operational research and management science, several techniques have been developed that can be applied to multicriteria decision problems. Some are very sophisticated regarding requirements and their mathematical foundations (Keeney and Raiffa, 1976); however, others pay more attention to their practical application, without giving up their formal foundations. In this second group, we could include the

MCA model used in this assessment. As any other MCA technique, its main aim is to develop a tool that will enable us to reduce multidimensional assessments of projects to a single dimension. This is needed to specify a preference ranking of the project. We now introduce a formal expression of the MCA method used.

Let us assume that the comparative assessment of the 21 actions of the regional category of the OP is represented by a continuous function (U) of all the relevant decision criteria used in the assessment:

$$U_i = u (X_{i1} , X_{i2} , X_{i3}) \quad \text{for } i = 1, \dots, 21 \quad (1)$$

where U_i denotes the value reached by function u ; X_{ij} is the score of action i in relation to criterion j (the three criteria used in assessment are): absorption rate; attainment of objectives and results, and synergies).

These criteria fulfil a series of assumptions (French, 1988), among which we can highlight the following:

1. Projects can be compared and ranked in a transitive way according to the preferences represented in expression (1).
2. The low score of a given criterion can be compensated by a higher score in another. However, it is possible to accept that the score of a project regarding a particular criterion is too low for such a compensation to be acceptable.
3. Preferences as mutually independent, i.e., if two projects are characterized by having the same score in some criteria, the ranking preference between them does not depend on these given values, but on the scores of the remaining criteria.

According to these assumptions, expression (1) can be written as follows:

$$U_i = u_1 (X_{i1}) + u_2 (X_{i2}) + u_3 (X_{i3}) \quad (2)$$

or as,

$$U_i = w_1 \cdot v_1 (X_{i1}) + w_2 \cdot v_2 (X_{i2}) + w_3 \cdot v_3 (X_{i3}) \quad (3)$$

where $v_j(\cdot)$ is an exact representation of function u (except for its scale) that provides the score of each action regarding each criterion and w_j is the weight attributed to criterion j in relation to the remaining criteria. In addition, $\sum w_j = 1$ is verified.

From among the many methods developed in the literature to estimate and normalize X_{ij} scores, we have opted for the simple point allocation method (Edwards and Newman, 1982). On the other hand, the selection of criteria and weights was negotiated between the assessor team and the OP management.

In this way, given that we assume the linear functions $v_j(\cdot)$, expression (3) can be written in its simply as follows:

$$U_i = w_1 \cdot s_{i1} + w_2 \cdot s_{i2} + w_3 \cdot s_{i3} \quad (4)$$

where s_{ij} ($= v_j(X_{ij})$) is the score obtained by action i in criterion j from a linear scale with values ranging from 0 to 100; w_j is the weight attributed to criterion j in relation to the other two criteria; and U_i represents the global score obtained for action i taking into account the three criteria used.

This methodology has allowed us to comparatively analyze each of the 21 actions integrated in the OP using the three criteria chosen, and later aggregate the three values to obtain a global score that allows us to make a comparative analysis between them.

Application of MCA to the comparative analysis of OP actions.

The MCA analysis has been applied to the comparative analysis of different actions, measures, and subprograms developed in the OP as follows:

STAGE 1. The action is the unit of analysis. The comparative values of measures, subprograms and the programme has been done by adding the values resulting from each action, weighted in relation to the percentage of eligible expenditures attributed to each action from the total eligible expenditure corresponding to the measure, subprogramme or program. This decision was based on the assumption that the distribution of eligible expenditures among the different actions reflects to a great extent the general priorities of the OP; i.e. the political relevance attributed to each action.

STAGE 2. When selecting the criteria -- and to define the problem correctly -- we not only ensured they were independent from each other, but also that they were comprehensive regarding the relevant dimensions of analysis -- although the number of dimensions has to be kept to a reasonable size (lower than 8 is usually recommended to keep the problem manageable). According to these premises, the criteria used in the global assessment of the OP are the following:

Absorption rate.

This quantitative indicator is defined as the proportion of the expenditures committed to each action at the closing date (31/12/99) in relation to the total expenditures scheduled.

Attainment of objectives and results.

There is no quantitative information regarding the objectives anticipated for each OP action or measure; on the other hand, it is not possible to obtain indicators for the results of the different actions or measures at the closing date, since some years have to pass to be able to observe the socio-economic impact of the actions developed. In this context, as the attainment of objectives and results criterion, we have adopted a qualitative evaluation of the contribution of each action to the achievement of the objectives set by the OP and corresponding to the measure the action belongs to. This evaluation was carried out taking into account the management's opinion of each action as well the opinion of the assessing team. The opinion of the management was obtained by using in-depth interviews and semi-structured questionnaires.

Synergies.

With this criteria we attempt to assess the complementarity or contribution of each action to other actions in the programme or to other regional economic policies.

STAGE 3. Allocating a weight to each criterion, thus reflecting the importance attributed to the criterion in relation to others. This was done by consensus with the General Management for the European Funds of the Andalusian Government. The weights were distributed as shown in Table 4.

Table 4. *Weights allocated to different assessment criteria.*

| CRITERIA | WEIGHT |
|--------------------------------------|---------------|
| Absorption rate | 35% |
| Attainment of objectives and results | 50% (*) |
| Synergies | 15% |

(*) The opinion of the management was given a weight of 40% and the research team's opinion the remaining 60% of the total score for this criterion.

STAGE 4. The score attributed to each action in terms of the chosen criteria was estimated in the following way:

Absorption rate.

The score for this quantitative criteria was calculated as a percentage of expenditures committed to each action in relation to the planned expenditures on a scale from 0 to 100.

Attainment of objectives and results.

In order to obtain the score for this criteria, and given its qualitative nature, we used "impact descriptors". These descriptors are short sentences indicating the different levels of contribution each action has on the achievement of the explicit objectives of the program. The levels were given values ranging from 0 to 5, and later were normalized to a scale of 0 to 100.

Synergies.

In order to evaluate possible synergies between each action, different levels of relationships with other regional policies measures were established. These levels and the scores attributed to each of them are shown in Table 5.

Table 5. *Synergies: values allocated to different levels of relationship.*

| SYNERGIES | SCORE |
|--------------------------------|--------------|
| With other INTERREG II actions | 0.5 |
| With other Regional Programs | 1.0 |
| With other National Programs | 1.5 |
| With other EU Programs | 2.0 |

In this way, the value of each action in relation to the given criteria is the result of adding scores attributed to each relationship detected. In principle, these scores were normalized, giving a value of 100 to the highest score observed. However, the application of this linear procedure to normalize a particular action whose synergy level surpassed in a significant way the pattern observed in the rest, made the scores of most other actions very low and difficult to detect. For this reason, the normalization procedure finally adopted was to give a maximum score of 100 to all those actions with a synergy level of 6 points or more.

STAGES 5 and 6. Finally, for each action we obtained the value resulting from calculating the weighted mean of the scores for the different criteria used according to the premises outlined. Several sensitivity analyses were carried out to study possible variations in the comparative analysis that could be caused by changes in the allocated weights or scores.

In short, the methodological design helps to give shape to a heterogeneous and non-structured scenario. The fact that the design was negotiated -- that is, the opinion of the different agents involved in decision-making was taken into consideration, and the criteria explicit to all actions were applied in an uniform way -- made it a key tool in the comparative analysis of the Operational Program.

5. Comparison and summary of the contribution that each action made to the criteria chosen to assess the program.

As an application of the methodology developed in the previous section, we present the results obtained when an MCA was applied to assess the regional section of the INTERREG II Spain-Morocco Operational Program. Table 6 shows the scores obtained for each action according to the criteria used, as well as the total score attributed to the OP in relation to the weights described in the previous section.

Taking into account its total score, action 1.5.1. (Business Cooperation with Morocco) has reached the highest values (91.5). The lowest global score (71.8) was for action 1.4.3 (Primary Care Health Program). In addition, 43% of the actions obtained values that were the same or higher than the mean for the program. In this group, we have included all actions belonging to Measures: 1.5 (Actions of Economic and Social Agents), 2.2 (Protection of Natural Heritage), 2.3 (Recovering Architectonic Heritage), 3.1. (Connections and Spatial Planning), as well as two actions in measure 2.1 (Protection of Water Resources).

On the other hand, Table 7 shows that the biggest differences in values are found especially in the *Synergies* and *Attainment of Objectives and Results* criteria, and to a lesser extent in the *Absorption Rate*.

In this latter criterion, the expenditures actually committed were the same or greater than those planned and so the absorption rate is 100% fulfilled. Only actions 1.1.3 (Study of the High Speed Train AVE for the Málaga-Córdoba Route) and 1.4.3 (Primary Care Health Program) did not reach these levels, although their scores were 99 and 97.9 respectively. On the other hand, the scores assigned to the synergy criterion are

distributed in a more uneven way around the program's mean. Thus, 16 out of the 21 actions have lower scores than the mean. Among them we can mention action 1.4.4 (Suggestions and Guidelines for Institutional Cooperation between de Andalusia-Morocco) with a score of 17 and actions 1.3.2 (Support and Consultancy for Small Business Enterprises) and 2.3.1 (Cooperation in House Planning and Architecture), both with a score of 33 each. The actions that have the highest scores in this criterion are 1.1.1 (Action on Energy Issues), 2.1.2 (Workshops on Technology and Organizational Transfer in Water Issues), and 2.2.1 (Promotion of Transnational Cooperation in Environmental Management). The lower scores in the criterion Attainment of Objectives and Results (56) corresponds to actions 2.1.1 (Seminars and Promotional Workshops on Water Resources) and 2.1.2 (Workshops on Technology and Organizational Transfer in Water Issues). The highest score (88) is related to actions 1.5.1 (Business Cooperation with Morocco), 1.5.3 (Cross-Border Cooperation in Labor Issues), and 2.3.1 (Cooperation on Housing and Architecture).

Finally, it is important to highlight that the projects administered by the Andalusian Government within the INTERREG II Spain–Morocco Operational Programme generally complied with EU regulations regarding environmental protection, public contracts, and publicity. The availability of monitoring questionnaires for the actions in this OP has allowed us to assess the level of respect towards and compliance with European Union policies and regulations.

Table 6. *Contribution of Actions on the Programme Score.*

| Actions | Financial performance | Attainment of objectives and Results | Synergies | Total | Weighting factor | Contribution of the Action |
|-----------------|-----------------------|--------------------------------------|-----------|-------|------------------|----------------------------|
| | (A) | (B) | (C) | (D) | (E) | (F) |
| 1.1.1 | 100.00 | 63.2 | 100 | 81.60 | 3.62 | 2.95 |
| 1.1.3 | 99.01 | 74 | 50 | 79.15 | 5.47 | 4.33 |
| 1.2.1 | 100.00 | 76 | 50 | 80.50 | 0.33 | 0.26 |
| 1.3.1 | 100.00 | 68 | 67 | 79.05 | 0.23 | 0.18 |
| 1.3.2 | 100.00 | 68 | 33 | 73.95 | 0.87 | 0.65 |
| 1.3.3 | 100.00 | 74 | 67 | 82.05 | 0.17 | 0.14 |
| 1.4.2. | 100.00 | 68 | 50 | 76.50 | 5.37 | 4.11 |
| 1.4.3. | 97.87 | 60 | 50 | 71.75 | 2.58 | 1.85 |
| 1.4.4. | 100.00 | 76 | 17 | 75.55 | 0.11 | 0.09 |
| 1.5.1. | 100.00 | 88 | 83 | 91.45 | 0.82 | 0.75 |
| 1.5.2. | 100.00 | 86 | 67 | 88.05 | 1.13 | 0.99 |
| 1.5.3. | 100.00 | 88 | 42 | 85.30 | 0.28 | 0.24 |
| 1.5.4. | 100.00 | 84.8 | 42 | 83.70 | 0.28 | 0.24 |
| 2.1.1. | 100.00 | 56 | 67 | 73.05 | 0.45 | 0.33 |
| 2.1.2. | 100.00 | 56 | 100 | 78.00 | 0.72 | 0.56 |
| 2.1.3. | 100.00 | 71.6 | 67 | 80.85 | 0.99 | 0.80 |
| 2.1.4. | 100.00 | 85.6 | 58 | 86.50 | 3.50 | 3.03 |
| 2.1.5. | 100.00 | 76 | 75 | 84.25 | 4.20 | 3.54 |
| 2.2.1. | 100.00 | 72.8 | 100 | 86.40 | 8.61 | 7.44 |
| 2.3.1. | 100.00 | 88 | 33 | 83.95 | 0.18 | 0.15 |
| 3.1.1. | 100.00 | 80 | 67 | 85.05 | 60.07 | 51.09 |
| Total OP | 99.89 | 76.97 | 68.53 | 83.73 | 100.00 | 83.73 |

Notes. The score for each criteria varies from 0 to 100.

(D) = (A x 0,35) + (B x 0,5) + (C x 0,15)

(F) = (D x E)/ 100

Table 7 *Criteria for the assessment of the program.*

| | Absorption rate | Attainment of objectives and Results | Synergies | Total |
|------------------------|-----------------|--------------------------------------|-----------|-------|
| Maximum | 100.00 | 88.00 | 100.00 | 91.45 |
| Minimum | 97.87 | 56.00 | 17.00 | 71.75 |
| Arithmetic mean | 99.85 | 74.29 | 61.19 | 81.27 |

5. Final Considerations.

This work presents the basic framework defining the Spain-Morocco INTERREG II Operational Programme and the socioeconomic context of the target area. A methodology has also been suggested to facilitate a comparative assessment of the projects using multicriteria analysis techniques. This methodology was applied to actions carried out within the Operational Programme under the Andalusian Regional Government's management.

Regarding the institutional and socio-cultural added value (European Commission 2000), we highlight that this programme represents an opportunity to create a solid environment for cross-border economic, commercial, and service exchanges between Spain and Morocco. In this sense, it could be advantageous to improve the coordination of this programme with other instruments of EU Foreign Policy, such as the MEDA programme. In this way, one of the INTERREG aims for the external borders of the EU contributing “to the stabilization, democratization, and prosperity of neighbouring regions ” (Shotton, 1998, pg.4) could be fulfilled.

Regarding the results obtained by applying this methodology, the main progress in cross-border cooperation derives from two aspects which the OP programme has had an impact on. First, it has increased the opportunity for better understanding between social and economic agents (Public Administration, Business Associations, and Unions). Second, it has improved access to the main Spanish and European transport corridors regarding cross-border trade and co-operation.

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